

AMENDMENTS TO THE CLAIMS

1-14. (Cancelled).

15. (Previously presented) A method of manufacturing a high-frequency assembly including a plurality of components, at least one of which is frequency-specific, using an automatic assembly apparatus, the method comprising:

placing a plurality of components on a high-frequency assembly using a placing apparatus of an automatic assembly apparatus;

identifying a frequency-encoding feature on a frequency-specific component prior to gripping the frequency-specific component with the placing apparatus;

accepting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is a correct component for the assembly; and

rejecting the frequency-specific component for connection to the high-frequency assembly if the frequency-encoding feature indicates that the frequency-specific component is not the correct component for the assembly.

16. (Previously Presented) The method of claim 15 wherein the frequency-specific component is taken from a stock that comprises a plurality of frequency-specific components, the method further comprising:

rejecting the entire stock of frequency-specific components if a predetermined number of frequency-specific components in the stock are successively rejected for connection.

17. (Previously Presented) The method of claim 15 further comprising:
 - searching for the frequency-encoding feature at a plurality of locations on the frequency-specific component; and
 - determining an orientation of the frequency-specific component based on a location at which the frequency-encoding feature is found.
18. (Previously Presented) The method of claim 17 further comprising:
 - identifying a reference point and a reference direction on the frequency-specific component;
 - forming a number of vectors beginning at the reference point, the vectors being of substantially equivalent length and forming pre-defined angles with respect to the reference direction; and
 - searching for the frequency-encoding feature at the ends of the vectors.
19. (Previously Presented) The method of claim 18 wherein each vector includes an end that terminates at a corner of a square.
20. (Previously presented) The method of claim 18 further comprising:
 - determining a rotational position of the frequency-encoding feature; and
 - distinguishing which of a plurality of features is indicated by the frequency-encoding feature based on the rotational position of the frequency-specific component.

21. (Previously Presented) The method of claim 15 further comprising:
 - detecting an outline of the frequency-specific component;
 - locating the frequency-encoded feature based on the detected outline of the frequency-specific component; and
 - determining an orientation of the frequency-specific component based on the located frequency-encoded feature.
22. (Previously Presented) The method of claim 15 wherein the frequency-specific component comprises a circuit board.
23. (Previously Presented) The method of claim 22 wherein the frequency-encoded feature comprises a conductive material.
24. (Previously Presented) The method of claim 15 wherein the frequency-specific component comprises a mechanical component.
25. (Previously Presented) The method of claim 24 wherein the mechanical component comprises a cover that covers a mounted component.
26. (Previously Presented) The method of claim 15 wherein the frequency-encoded feature comprises a bore.
27. (Previously Presented) The method of claim 15 wherein the frequency-encoded feature comprises an indication printed on the frequency-specific component.

28. (Cancelled).
29. (Previously presented) A manufacturing apparatus for the automatic manufacture of a high-frequency assembly comprising:
- a placing apparatus to place one or more components on a high-frequency assembly, wherein at least one of the components comprises a frequency-specific component; a sensor to detect a frequency-encoded feature associated with the frequency-specific component that indicates an operating frequency of the frequency-specific component; a controller operatively connected to the sensor and configured to:
- receive a signal from the sensor responsive to the detection of the frequency-encoded feature; and
- control the placing apparatus to place the frequency-specific component on the assembly, or to reject the frequency-specific component based on the received signal prior to the component being taken up by the placing apparatus.
30. (Currently Amended) The component apparatus of claim 28, ~~wherein the component is provided with said machine-detectable frequency-encoding feature at one of a plurality of locations on a surface of the component,~~ 29 wherein the orientation of the frequency-specific component can be determined from ~~at which one of the locations~~ a location at which the feature is found on the frequency-specific component in relation to a reference edge of the component.
31. (Currently Amended) The component apparatus of claim 28, 29 wherein the orientation of the frequency-specific component can be determined from the a location at which the machine-detectable frequency-encoding frequency-encoded feature is found with respect to the outline of the frequency-specific component.

32. (Currently Amended) The component apparatus of claim 28, 29 wherein the machine-detectable frequency-encoding frequency-encoded feature is an optically detectable feature.

33. (Previously presented) The method of claim 15, wherein the step of identifying the frequency-encoding feature comprises optically identifying said frequency-encoding feature.

34. (Previously presented) The apparatus of claim 29, wherein the sensor is a camera.